

FIG-1 RAPID GENERATION OF SITE-SPECIFIC CHROMOSOMAL MUTANTS

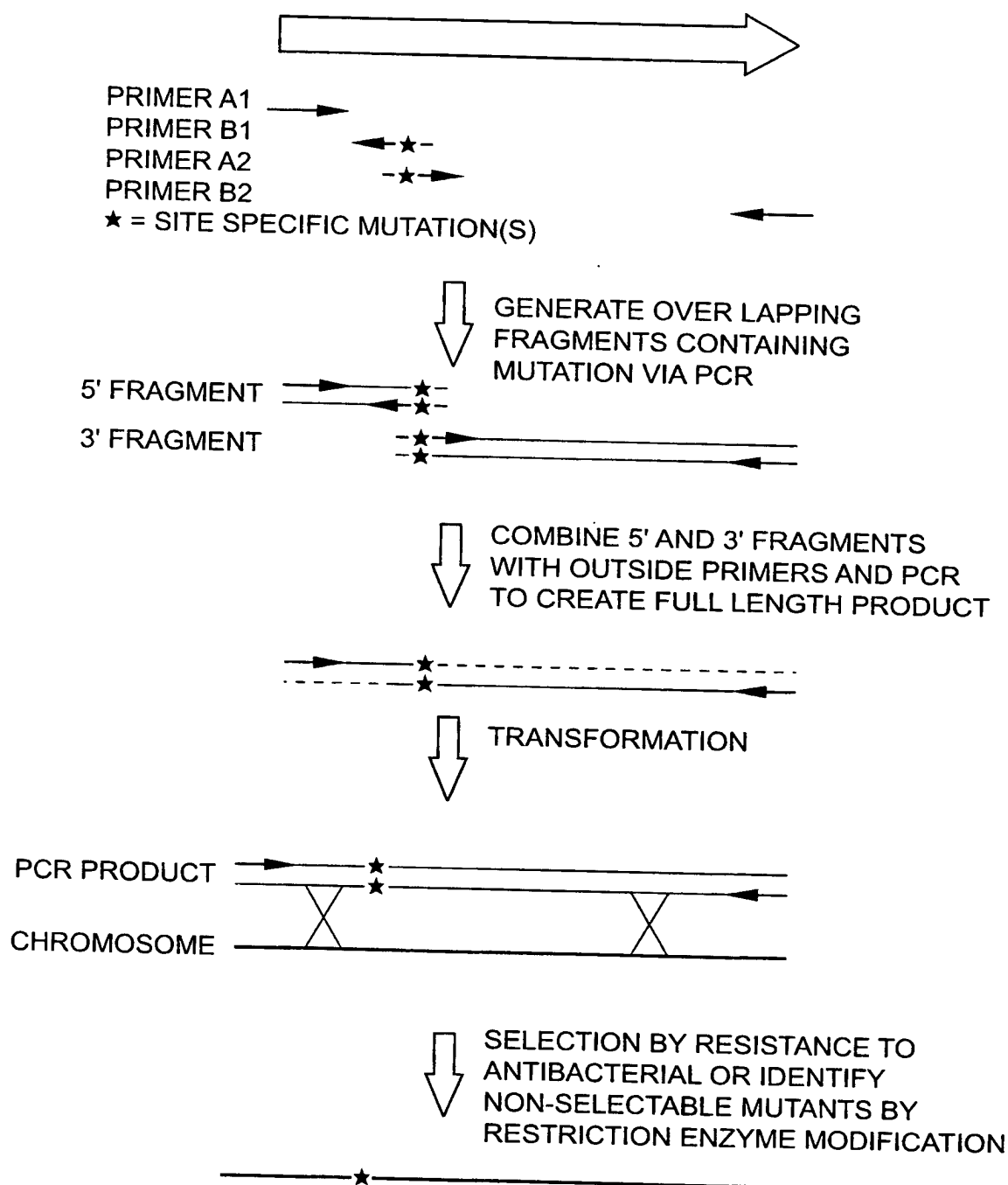


FIG-2 RANDOM MUTAGENESIS AND IDENTIFICATION
OF MUTATIONS RESPONSIBLE FOR
QUINOLONE RESISTANCE

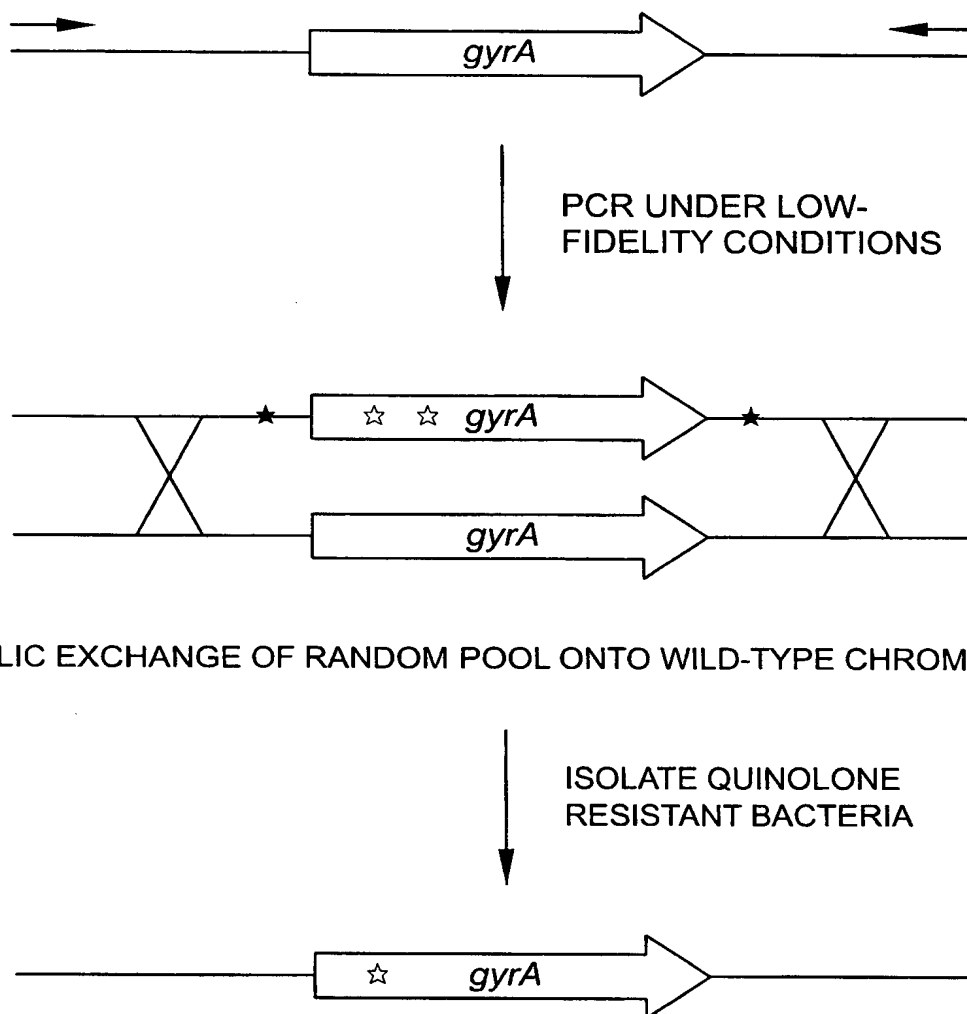


FIG-3

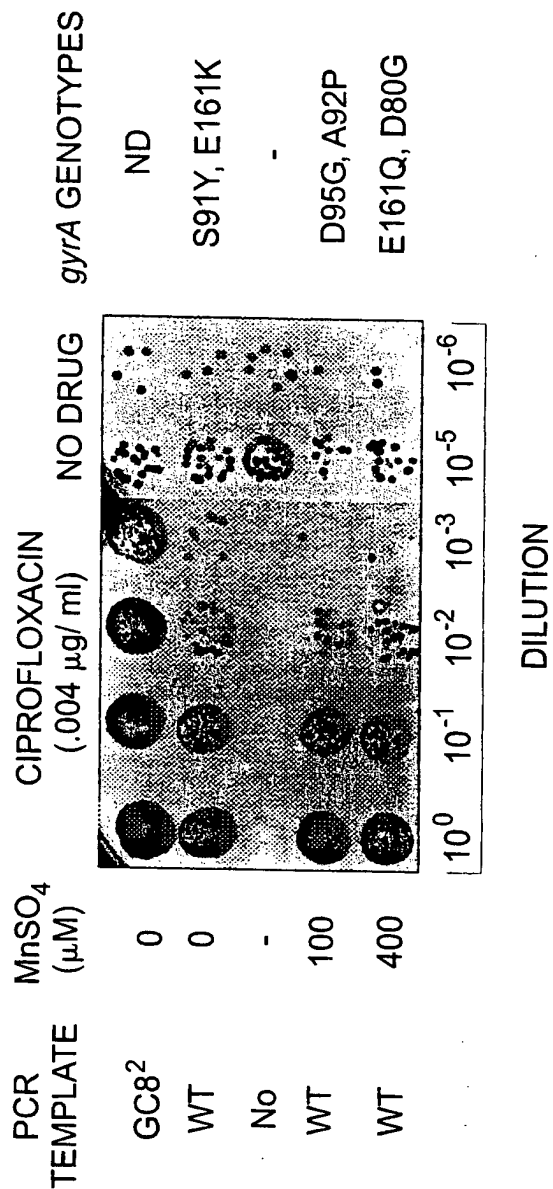


FIG-4 RAPID ANTIMICROBIAL TARGET ELUCIDATION (RATE)

1) GENERATE A LIBRARY OF RANDOM CHROMOSOMAL POINT MUTATIONS BY PCRing WITH LOW-FIDELITY CONDITIONS

2) TRANSFORM POOLS OF 12 PCR PRODUCTS (100KB) INTO A WILD-TYPE BACKGROUND AND ISOLATE STRAINS RESISTANT COMPOUND

3) RE-TRANSFORM WITH INDIVIDUAL PRODUCTS (10KB) FROM POOLS WHICH CONFERRED RESISTANCE TO IDENTIFY FRAGMENTS WITH MUTATION(S)

4) GENERATE SMALLER PCR PRODUCTS (1kb) TO FURTHER MAP MUTATION(S) RESPONSIBLE FOR PHENOTYPE

5) SEQUENCE DNA FROM REGION CONFERRING RESISTANCE FROM RESISTANT ISOLATE

